

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 32

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte FUMIKO YANO, YASUSHI FUJII
and HIROFUMI GOTO

Appeal No. 96-1106
Application 07/998,721¹

HEARD: MARCH 10, 1999

Before McCANDLISH, Senior Administrative Patent Judge, STAAB
and McQUADE, Administrative Patent Judges.

McQUADE, Administrative Patent Judge.

DECISION ON APPEAL

Fumiko Yano et al. appeal from the final rejection of
claims 14, 17 through 20, 23 and 24, all of the claims pending

¹ Application for patent filed December 30, 1992.

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in the application.²

The invention relates to a traffic navigation apparatus and method. Copies of claims 14, 17 through 20, 23 and 24 appear in the appendix to the appellants' main brief (Paper No. 15).³

The references relied upon by the examiner as evidence of obviousness are:

Link	5,184,303	Feb. 2, 1993 (filed Feb. 28, 1991)
Kirson	5,220,507	Jun. 15, 1993 (effectively filed Nov. 8, 1990)

Claims 14, 17 through 20, 23 and 24 stand rejected under 35 U.S.C. § 103 as being unpatentable over Link in view of Kirson.

Reference is made to the appellants' main brief (Paper No. 15) and to the examiner's answer (Paper No. 16) for the respective positions of the appellants and the examiner with

² Claim 23 has been amended subsequent to final rejection.

³ As pointed out by the examiner on page 2 in the answer (Paper No. 16), the copy of claim 23 appended to the main brief does not include the amendments made subsequent to final rejection (see note 2 supra).

regard to the merits of this rejection.⁴

Link discloses a vehicle route planning system 10 which includes data input devices 11 and 12, a navigation computer 13,

a road map data memory 14, direction, distance and position sensors 15, an output speaker 16 and an output CRT display 17.

As described by Link,

in response to system user inputs provided via the input devices 11 and/or 12, the navigation computer 13 will plan a desired route, via fixed roadways defined by the data in the road map memory 14, and store the desired route, at least temporarily, in a route memory location 18 contained in the navigation computer 13. The actual planning of the desired route is accomplished by a route planning module 19 which is part of the navigation computer 13. The module 19 represents specific route planning software programmed into the computer 13.

The navigation computer 13 also includes an origin data memory 20, a destination data memory 21 and a detour memory 22 which has at least three subdivisions. One of the detour memory subdivisions is a system detour memory 23, and driver detour and trip detour memories 24 and 25 comprise subsystem

⁴ The record (see Paper No. 19) indicates that the examiner has refused to enter the appellants' reply brief (Paper No. 18). Accordingly, we have not considered the arguments advanced in the reply brief in reviewing the merits of the appealed rejection.

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detour memories which are part of the detour memory
22 [column 3, lines 35 through 52].

The detour control aspect of Link's system allows a user to designate detour areas which can be excluded from (1) all of the routes calculated by the system, (2) some, but not all, of the calculated routes, or (3) all of the routes calculated for a specific driver (see, for example, column 2, lines 5 through 50). Link teaches that the detour area data inputted to the system may be specified as "an intersection, a road segment, an entire roadway or a geographical region" (column 8, lines 31 and 32).

Kirson discloses an apparatus which calculates and displays multiple navigation routes for a vehicle. The apparatus 10 includes a navigation computer 11 having a trip memory 12, a road map data memory 13, direction, distance and positions sensors 14, data input devices 15 and 16, an output speaker 17 and an output CRT display 18. As described by Kirson,

the vehicle operator will enter into the navigation computer data concerning a desired destination. The computer already knows the present vehicle location due to the sensors 14 and is aware of what roads

exist in the area due to the data in memory 13. The navigation computer then proceeds to calculate an optimum road path route between the start position of the vehicle and the desired destination. This road path route is optimized based on either a minimum time or minimum distance criterion which criterion is preprogrammed into the navigation computer 11. In addition, the route selected by the computer 11 will also take into account any trip preferences and detours which are stored in the trip memory 12 [column 3, lines 39 through 52].

As for the additional navigation route calculations, "[t]he trip memory 12 also includes storage locations 23 and 24 in which additional detour or preference information will be stored that will be used in calculating a second and third route, respectively" (column 4, lines 32 through 36). Kirson teaches that

the navigation apparatus 10 will display to the vehicle operator each of the calculated routes along with preferably both the mileage associated with each route and the travel time associated with each route. Thus the vehicle operator will now have a visual display of each of the three different routes along with ranking criteria describing the mileage and travel time differences between the routes. Then the vehicle operator can select which of the three calculated routes he desires with regard to implementing vehicle guidance instructions for the vehicle operator so as to arrive at the desired destination [column 5, lines 28 through 39].

Appealed claim 14 recites a traffic navigation apparatus

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for a vehicle comprising, inter alia, first search means for seeking a recommendable route between two points, second search means for seeking a recommendable route connecting the two points by by-passing an avoidance region, and

means for displaying the recommendable route which is sought by said first search means . . . if a difference between a distance of the recommendable route sought by said first search means and a distance of the recommendable route sought by said second search means is larger than a predetermined value, and otherwise displaying the recommendable route which is sought by said second search means

Claim 23 is similar in that it recites a traffic navigation method for a vehicle comprising, inter alia, the steps of determining a recommendable route between two points, determining a recommendable route between the two points by by-passing an avoidance region, and

displaying the recommendable route . . . if the increase in distance between the recommendable route by by-passing the avoidance region and the recommendable

route is larger than a predetermined value, and otherwise displaying the recommendable route by-passing the avoidance region

The appellants' contention that Link and Kirson would not have suggested a traffic navigation apparatus and method

meeting the foregoing display limitations is well taken. The examiner's conclusion to the contrary is predicated on the general discussion of driver preferences at column 6, lines 6 through 13, of the Link reference and on the depiction of text and graphic display formats in Figures 4 and 5 of the Kirson reference (see pages 2 through 5 in the answer). Suffice to say that neither has any particular relevance to the specific display limitations set forth in claims 14 and 23.

Accordingly, we shall not sustain the standing 35 U.S.C. § 103 rejection of claims 14 and 23, or of claims 17 and 18 which depend from claim 14.

We shall sustain, however, the standing 35 U.S.C. § 103 rejection of claims 19, 20 and 24.

Here, the appellants' argument that the rejection of these claims is unsound because Link and Kirson would not have suggested a traffic navigation apparatus and method meeting the

last four elements in apparatus claims 19 and 20 or the last four steps in method claim 24 (see pages 6 and 7 in the main

brief) is belied by the fair teachings of the references.

To begin with, it is true that neither reference discloses means for calculating and displaying the difference between the distances of two recommendable routes as recited in claims 19 and 20, or the corresponding calculating and displaying steps recited in claim 24. As indicated above, however, Kirson does teach the calculation and simultaneous display of alternate route information with ranking criteria describing mileage differences (see Figures 4 and 5) to allow the vehicle operator to make an informed decision as to route selection. This concern with conveying mileage differences to the vehicle operator would have suggested the actual calculation and display of such differences in order to avoid the need for the vehicle operator to perform a mental calculation of same.

Furthermore, Kirson's disclosure of the selection of one of the alternative routes to implement vehicle guidance instructions, presumably via speaker 17 and CRT display 18, would have suggested an apparatus and method meeting the selected route input and display means/steps recited in claims 19, 20 and 24.

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Claims 19 and 20 additionally call for the avoidance region to be set using a telephone number (claim 19) or a postal zip code (claim 20). As indicated above, Link teaches that detour or avoidance regions may be set using a number of different parameters such as intersection, road segment, entire roadway or geographical region (see the passage from column 8 reproduced above). This disclosure of alternative parameters to set a detour or avoidance region would have suggested the similar use of other parameters commonly known to be associated with specific areas such as a telephone number or a postal zip code.

Thus, the examiner's rejection of claims 19, 20 and 24, to the extent argued by the appellants, is well founded.

In summary and for the above reasons, the decision of the examiner to reject claims 14, 17 through 20, 23 and 24 under 35 U.S.C. § 103 is affirmed with respect to claims 19, 20 and 24, and reversed with respect to claims 14, 17, 18 and 23.

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No time period for taking any subsequent action in
connection with this appeal may be extended under 37 CFR
§ 1.136(a).

AFFIRMED-IN-PART

HARRISON E. McCANDLISH)	
Senior Administrative Patent Judge)	
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LAWRENCE J. STAAB)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
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JOHN P. McQUADE)	
Administrative Patent Judge)	

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